

PATENT CLAIMS

1. A device (1) for withdrawing a bar (3) produced in a bar or tube press (2) which has at least one driven linearly movable first carriage (4) which is movable in the withdrawal direction L of the bar (3) and applies a tractive force to the bar (3),

characterized in that

on the first carriage (4) a second carriage (5) is arranged which is movable relative to the first carriage 4 in the withdrawal direction (L), whereby the bar (3) to be withdrawn is fixed to the second carriage (5).

2. The device according to claim 1 characterized in that for movement of the second carriage (5) relative to the first carriage (4) motor means (7) are provided.

3. The device according to claim 2 characterized in that the motor means (7) is a controllable motor, especially a servomotor.

4. The device according to claim 2 or claim 3 characterized in that the motor means (7) connects the first and second slides (4, 5) together through transmission means (8).

5. The device according to one of claims 1 to 4 characterized in that on the first and/or second carriage (claim 4 and claim 5) at least one sensor (9) is arranged.

6. The device according to claim 5 characterized in that
5 the sensor 9' detects the acceleration of the second carriage.

7. The device according to claim 5 characterized in that the sensor 9" detects the position of the second carriage (5) relative to the first carriage (4).

8. The device according to claim 6 characterized in that
10 the sensor 9"' detects the force applied by the second carriage (5) to the end (6) of the bar (3).

9. The device according to one of the claims 5 to 8 characterized by control and/or regulating means (10) which acts upon the motor means (7) based upon the detected measured values to
15 influence the withdrawal force applied to the end (6) of the bar (3).

10. The device according to claim 9 characterized in
that the control and/or regulating means (10) influences the torque of the motor means (7).

11. The device according to one of claims 1 to 10 characterized in that the mass (M) of the first carriage (4) is at least twice the mass (m) of the second carriage (5).